

any sort of organization that, [although] not required to be reported under our current system, is important for people to know."

Critics say that laws that grant immunity from prosecution can protect people who violate environmental laws and regulations. The EPA is opposed to the privilege and immunity laws for this reason. "We oppose them all," says Bertram Frey, deputy counsel for the EPA's Midwest region. "They block the search for truth," he says.

Moreover, Frey argues, such legislation can actually penalize companies that spend money to comply with environmental law and regulations. Companies that don't comply may have an economic advantage in states with such legislation because they potentially don't get penalized for failing to follow environmental regulations.

Instead of audit privilege laws, the EPA has a penalty mitigation policy that the agency says offers reduced penalties for companies that fix violations uncovered by voluntary audits. "We've gotten over 150 disclosures from over 400 facilities in the country," says Frey. "In the majority of the cases there has been no penalty. These are record-keeping violations." But they are not necessarily minor, Frey adds, because such reports involve toxic release inventories or information crucial to safe drinking water programs. "We think the EPA policy, offering significant mitigation, is very reasonable," says Woodall.

But in the opinion of Nancy Newkirk, a Washington lawyer who counsels businesses and tracks audit privilege legislation, the policy has weaknesses. "The [EPA] policy is quite good. But the Justice Department isn't bound by it [and] no other federal, state, or regulatory body is bound by it, so you can have a situation where a company does an audit, finds a problem, and gets treated as though the [EPA] found the problem," she says, which means the company may be punished. Newkirk says the EPA's opposition to audit privilege laws so far has consisted of testifying against such laws in state capitals and working to modify them. The agency has testified in Texas and Utah and is discussing legislation with Michigan. The EPA also opposed audit privilege legislation during debate in the last congress.

The EPA has another weapon against the laws, which to date it hasn't used: the agency can remove a state's authority to enforce federal environmental statutes. That would dry up federal environmental grants and also means that a state's businesses would have to deal with EPA regional headquarters for permits instead of state regulators, which can be far more time-consuming. In Colorado, Vincent is part of a group of environmental leaders who have petitioned the EPA to

withdraw portions of Colorado's delegated authority under the Clean Water Act on the grounds that it prohibits the state from effectively enforcing the federal law and from operating a program approvable under federal law.

The debate over audit privilege legislation will soon move to Washington, DC. In June, senators Kay Bailey Hutchison (R-Texas) and Trent Lott (R-Mississippi) introduced federal audit privilege legislation. This is the second time around for such federal legislation; an earlier attempt, which appeared to protect willful criminal conduct by not specifically excluding it, died in the last congress.

Mexico Moves to Phase out DDT and Chlordane

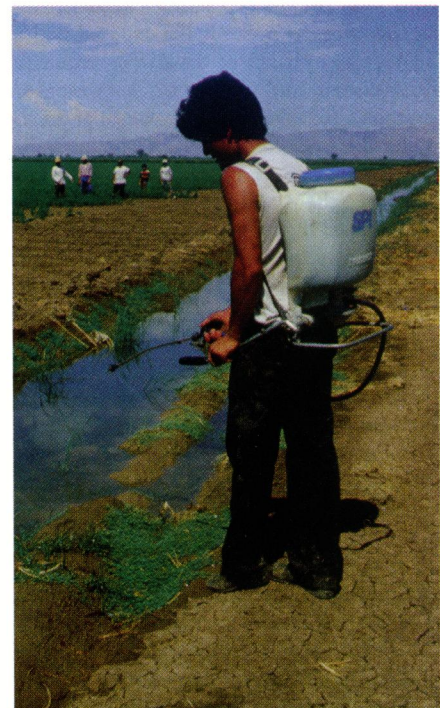
Taking the lead among the countries of Latin America, the Mexican government on 16 July 1997 unveiled a program designed to phase out all uses of the pesticides DDT and chlordane within 10 years. Calling for an 80% reduction in the use of DDT over the next five years, cessation of additional uses by the year 2007, and elimination of the use of chlordane by December 1998, Mexico hopes its experience will provide a model for other Latin American and Caribbean countries attempting to reduce their own dependence on organochlorine pesticides.

The specific elements of the program as they relate to each chemical are contained in a North American Regional Action Plan (NARAP) for each chemical. The NARAPs were drafted by the Commission for Environmental Cooperation (CEC), a Montreal-based intergovernmental organization that is jointly administered by Carol Browner, administrator of the U.S. EPA; Julia Carabias, minister of the Environment, Natural Resources, and Fisheries of Mexico; and Christine Stewart, minister of Environment Canada. The CEC was created to coordinate the agenda of the North American Agreement on Environmental Cooperation, which serves as a complement to the environmental provisions established under the North American Free Trade Agreement.

DDT, which has long been banned in both the United States and Canada, still finds limited use in Mexico as part of the country's arsenal in the war against the *Anopheles* mosquito, carrier of the *Plasmodium* parasite that causes malaria. Approximately 60% of the Mexican territory, representing an area inhabited by close to 45 million people, provides an environment suitable for malaria transmission. According to Cristina Cortinas de Nava, coordinator of the Union of Chemical Substances and

Environmental Evaluation at the Mexican National Institute of Ecology in Mexico City, the NARAP for DDT will build upon the country's existing malaria control program—which has successfully reduced the annual incidence of the disease from 2.4 million cases in the 1940s and 1950s to approximately 5,000 cases today—while simultaneously reducing annual domestic DDT production and use from 25,000 tons to a production rate of approximately 600 tons. The use of DDT is presently restricted to selected government-authorized applications in dwellings.

Much of the success of Mexico's malaria control program (there have been no recorded deaths from malaria since 1982) is due to improvements in sanitation, increased disease surveillance, and integrated pest management schemes that focus pesticide applications on critical habitats and stages in the mosquito's life cycle. According to de Nava, the NARAP will use these proven strategies while conducting experimental pilot studies on alternatives to DDT. Such alternatives include biological control agents such as larval parasites and adult predators, microbial products such as *Bacillus thuringiensis*, and other less persistent pesticides such as pyrethroids. Additionally, the NARAP calls for increased community involvement in the malaria control program, increased enforcement against illegal uses of DDT, and restrictions on transborder movement of malaria-infected populations.



Pesticide prohibition. Mexico has launched an ambitious program to phase out the use of the dangerous pesticides DDT and chlordane.

The Health of Nations

Since 1902, the Pan American Health Organization (PAHO), the world's oldest international agency, has been working to combat disease and improve living standards in the Americas and the Caribbean. Though wars, political schisms, language barriers, and mistrust have been formidable challenges to its mission, PAHO continues to unite diverse peoples against the common enemies of natural disaster and disease.

The task facing PAHO, which acts as the regional office of the World Health Organization (WHO), is a formidable one. In Latin America and the Caribbean, 130 million people do not have access to safe drinking water and 160 million lack permanent access to basic health services. Despite such obstacles, PAHO has made huge achievements in protecting public health, such as completely eradicating polio from the region. The last wild polio virus in the Americas was detected on 5 September 1991 in Peru.

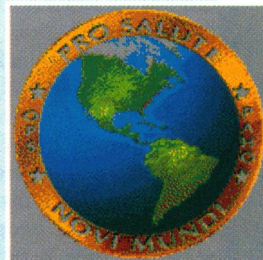
Part of PAHO's success stems from its ability to adapt the resources of the most technologically advanced countries to the needs of the most isolated villages. For example, PAHO distributes relevant health information throughout the Americas via its World Wide Web site, located at <http://www.paho.org/>. The site is as expansive and diverse as the region it covers, with information on everything from which countries are experiencing measles outbreaks to what public health resources are available in Barbados to the infant mortality trends in Nicaragua.

The What's New link on the PAHO home page provides links to the most current information, which in turn is linked to other related material. For example, from the What's New page users can access the latest articles written for *NutriInfo*, PAHO's electronic food and nutrition magazine, and then follow the Back link on the *NutriInfo* page to access the PAHO Food and Nutrition Program home page. (Users should be aware that links labeled "Back" always lead to more general information.) Also available under the What's New link are the contents and abstracts of the most current issues of the *Pan American Journal of Public Health* and information on ordering the latest books and technical papers published by PAHO. Upcoming PAHO conferences, the status of certain diseases in the Americas, and PAHO press releases are also provided under the What's New link.

The majority of the public health information on the PAHO site is found through the Technical Information home page. The Technical Information page lists the seven major divisions of PAHO with links to pages covering each division's programs and projects. Information on how to obtain PAHO/WHO fellowships and how to subscribe to PAHO's AHEALTH listserv discussion group can also be found by following the Fellowships link and the Information Systems link on this page. The Disasters/Humanitarian Assistance link on the Technical Information page is connected to a list of materials to help nations prepare for and recover from natural disasters. Information is provided on how to contact relief coordinators, the contents of a WHO emergency health kit, how to order relief supply management software, PAHO's quarterly disaster newsletter, and a wide range of disaster training materials. An extensive disaster database available on the Web is also being planned. The Health Systems and Services Development division home page includes a link to the home page of *BRIDGE*, a newsletter on health research, and to directories of public health institutions throughout Latin America and the Caribbean.

The Country Health Profiles link on the PAHO home page takes users to a list of all the countries and colonies in the region that PAHO serves. Each item on this list is a link to a health summary for that territory, updated every four years, with statistics such as rate of population growth, the age and geographic distribution of the population, infant mortality, and life expectancy.

Under the Media Center link on the PAHO home page, users can click on the PAHO Speakers' Bureau link to get details on how to bring a PAHO public health expert to their communities to meet with local professional or community groups. There are also links to the first two issues of PAHO's new *Perspectives on Health* magazine. More information on PAHO's many print and electronic publications is available under the Publications link on the home page. As with the Web site itself, most of these publications are available in both English and Spanish.



That Mexico has been able to successfully limit the spread of malaria while simultaneously reducing the use of DDT leaves de Nava hopeful about eliminating the pesticide's use altogether. "I'm very optimistic; the campaign has already made great strides," she said. "The problem is one of economics—alternatives can cost up to three times as much as DDT, and we need to be sure that the alternatives don't pose risks [that are greater than] those posed by DDT."

Use in Mexico of chlordane, which is banned from use in the United States and Canada, is limited to urban applications for the control of termites. Until recently, Mexico imported approximately 45 tons of chlordane annually from the United States (where it is legal to manufacture it). Under the NARAP for chlordane, however, Mexico intends to deplete its existing stocks and will no longer allow imports of the pesticide. Furthermore, Velsicol, the sole U.S. manufacturer of chlordane, announced in May of this year that it had voluntarily ceased production at all of its national and international facilities.

Under the NARAP for chlordane, a multi-phase regulatory program has been initiated that focuses primarily on the development of an integrated termite control strategy, prohibition of importation, environmental monitoring and risk assessment of chlordane-exposed individuals, monitoring of existing stocks, and cancellation of the existing registration for use in Mexico.

According to Andrew Hamilton, scientific director of the CEC, Mexico will look to agencies within the United States and Canada for both technical expertise in implementing the NARAPs and assistance in obtaining funding. "Involvement by U.S. and Canadian agencies will help to strengthen proposals geared toward international lending agencies such as the World Bank," he said. "For example, the U.S. Agency for International Development [USAID] has had significant experience from its work in the tropics." The USAID can be of direct assistance to Mexico in terms of providing expertise in malaria control and they can also help by directly acting as co-sponsors for grant proposals to the World Bank.

Hamilton reaffirmed Mexico's commitment to eliminating its use of organochlorines, and stated that among the incentives for terminating the pesticides' use is a desire to take part in the international effort to reduce the migration of persistent chemicals to arctic environments. "The idea of a tropical country taking an active role in the Arctic won't go unnoticed," he said.